

Listing of Claims:

1. (Currently amended) A computer keyboard, comprising:

a frame;

a plurality of keys located on the frame, each key of the plurality lying on its own movement axis and having pressed and unpressed positions along that movement axis;

a plurality of force sensors coupled to the frame and configured such that at least a portion of a force applied by a user to one or more keys of the plurality is transferred to the ~~force sensors~~ force sensors, the force sensors generating outputs that vary in relation to the magnitude of the user-applied force, wherein the plurality of force sensors are not located on any of the movement axes; and

a microprocessor in electrical communication with the force ~~sensor~~ sensors and configured, upon a user pressing multiple keys of the plurality, to

detect simultaneous presses of multiple keys and identify the pressed keys,

receive output data from the force sensors resulting from the simultaneous key presses, and

~~apportion among the multiple pressed keys a total force represented by the received force sensors output data~~ determine forces pressing each of the pressed keys based on the output data from the force sensors and relative locations of the pressed keys and the force sensors.

2. (Original) The computer keyboard of claim 1, further comprising a grid of conductors located on the frame and forming a plurality of intersections, each intersection including a pair of conductors from the grid, wherein:

each key of the plurality is located over a corresponding intersection and causes an electrical connection between the two conductors of the corresponding intersection when the key is pressed, and

the microprocessor is in electrical communication with the conductors.

3. (Previously presented) The computer keyboard of claim 1, wherein the microprocessor is configured to:

individually test each key of the plurality to detect if said key is pressed by a user,
and

only receive force sensors output data when a key press has been detected.

4. (Previously presented) The computer keyboard of claim 1, wherein each of the force sensors comprises an upper and a lower conductor and a force-sensitive resistor material located between the upper and lower conductors.

5. (Currently amended) The computer keyboard of claim 4, wherein the microprocessor is configured to:

individually test each key of the plurality to detect if said key is pressed by a user,
permit, upon detecting a pressed key, a voltage to pass to ground through the
force sensors, and

measure, subsequent to permitting said voltage to pass to ground through the
force sensors, outputs of the ~~force sensors~~ force sensors.

6. (Previously presented) The computer keyboard of claim 5, further comprising an 8-bit Analog to Digital Converter (ADC) coupled to said force sensors and to the microprocessor and configured to convert force sensor voltage levels to 8-bit digital values.

7. (Original) The computer keyboard of claim 1, wherein the plurality of keys includes multiple character keys having respective characters assigned thereto and a plurality of modifier keys.

8. (Original) The computer keyboard of claim 7, wherein the plurality of keys includes at least 36 character keys.

9.-11. (Canceled)

12. (Currently amended) The computer keyboard of ~~claim 11~~ claim 2, further comprising an Analog to Digital Converter (ADC) coupled to the force sensors and to the microprocessor, wherein the microprocessor is coupled to the force sensors via the ADC and receives ~~force~~ output data output from the force sensors after digital conversion of said output data by the ADC.

13. (Currently amended) The computer keyboard of claim 12, wherein the microprocessor is configured to:

ground a pin in electrical contact with a first conductor,

test a pin in electrical contact with a second conductor for a voltage level

indicative of a press of the key ~~associated with~~ corresponding to the intersection of the first and second conductors, and

upon detecting the voltage level indicating a press of the ~~associated~~ corresponding key, read from the ADC force data generated by the press of the ~~associated~~ corresponding key.

14. (Original) The computer keyboard of claim 13, wherein each force sensor comprises an upper and a lower conductor and a force-sensitive resistor material located between the upper and lower conductors.

15. (Original) The computer keyboard of claim 14, wherein the plurality of force sensors comprises at least four force sensors.

16. (Original) The computer keyboard of claim 15, wherein the plurality of keys includes multiple character keys having respective characters assigned thereto and a plurality of modifier keys.

17. (Original) The computer keyboard of claim 16, wherein the plurality of keys includes at least 36 character keys.

18. (Previously presented) The computer keyboard of claim 1, wherein the microprocessor is configured, upon a user pressing a single key of the plurality, to
- receive corresponding force sensors output data resulting from the single key
- press, and
- identify the single pressed key using the corresponding force sensors output data.